PF-0683 PCT

SEQUENCE LISTING

<110> INCYTE PHARMACEUTICALS, INC.
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LU, Dyung Aina M.
AU-YOUNG, Janice

<120> REGULATORS OF INTRACELLULAR PHOSPHORYLATION

<130> PF-0683 PCT

<140> To Be Assigned
<141> Herewith

<150> 60/125,593; 60/135,049; 60/143,188
<151> 1999-03-18; 1999-05-20; 1999-07-09

<160> 28

<170> PERL Program

<210> 1
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<212> PRT
<213> Homo sapiens

<220>
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<223> Incyte ID No: 480457CD1

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Arg	Pro	Val	Arg	Pro	Gln	Asp	Leu	Asn	Leu	Cys	Leu	Asp	Ser	Ser	
				20				25						30	
Tyr	Leu	Gly	Ser	Ala	Asn	Pro	Gly	Ser	Asn	Ser	His	Pro	Pro	Val	
				35				40						45	
Ile	Ala	Thr	Thr	Val	Val	Ser	Leu	Lys	Ala	Ala	Asn	Leu	Thr	Tyr	
				50				55						60	
Met	Pro	Ser	Ser	Ser	Gly	Ser	Ala	Arg	Ser	Leu	Asn	Cys	Gly	Cys	
				65				70						75	
Ser	Ser	Ala	Ser	Cys	Cys	Thr	Val	Ala	Thr	Tyr	Asp	Lys	Asp	Asn	
				80				85						90	
Gln	Ala	Gln	Thr	Gln	Ala	Ile	Ala	Ala	Gly	Thr	Thr	Thr	Thr	Ala	
				95				100						105	
Ile	Gly	Thr	Ser	Thr	Thr	Cys	Pro	Ala	Asn	Gln	Met	Val	Asn	Asn	
				110				115						120	
Asn	Glu	Asn	Thr	Gly	Ser	Leu	Ser	Pro	Ser	Ser	Gly	Val	Gly	Ser	
				125				130						135	
Pro	Val	Ser	Gly	Thr	Pro	Lys	Gln	Leu	Ala	Ser	Ile	Lys	Ile	Ile	
				140				145						150	
Tyr	Pro	Asn	Asp	Leu	Ala	Lys	Lys	Met	Thr	Lys	Cys	Ser	Lys	Ser	
				155				160						165	
His	Leu	Pro	Ser	Gln	Gly	Pro	Val	Ile	Ile	Asp	Cys	Arg	Pro	Phe	
				170				175						180	

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Met Glu Tyr Asn Lys Ser His Ile Gln Gly Ala Val His Ile Asn
                185                 190                 195
Cys Ala Asp Lys Ile Ser Arg Arg Arg Leu Gln Gln Gly Lys Ile
                200                 205                 210
Thr Val Leu Asp Leu Ile Ser Cys Arg Glu Gly Lys Asp Ser Phe
                215                 220                 225
Lys Arg Ile Phe Ser Lys Glu Ile Ile Val Tyr Asp Glu Asn Thr
                230                 235                 240
Asn Glu Pro Ser Arg Val Met Pro Ser Gln Pro Leu His Ile Val
                245                 250                 255
Leu Glu Ser Leu Lys Arg Glu Gly Lys Glu Pro Leu Val Leu Lys
                260                 265                 270
Gly Gly Leu Ser Ser Phe Lys Gln Asn His Glu Asn Leu Cys Asp
                275                 280                 285
Asn Ser Leu Gln Leu Gln Glu Cys Arg Glu Val Gly Gly Gly Ala
                290                 295                 300
Ser Ala Ala Ser Ser Leu Leu Pro Gln Pro Ile Pro Thr Thr Pro
                305                 310                 315
Asp Ile Glu Asn Ala Glu Leu Thr Pro Ile Leu Pro Phe Leu Phe
                320                 325                 330
Leu Gly Asn Glu Gln Asp Ala Gln Asp Leu Asp Thr Met Gln Arg
                335                 340                 345
Leu Asn Ile Gly Tyr Val Ile Asn Val Thr Thr His Leu Pro Leu
                350                 355                 360
Tyr His Tyr Glu Lys Gly Leu Phe Asn Tyr Lys Arg Leu Pro Ala
                365                 370                 375
Thr Asp Ser Asn Lys Gln Asn Leu Arg Gln Tyr Phe Glu Glu Ala
                380                 385                 390
Phe Glu Phe Ile Glu Glu Ala His Gln Cys Gly Lys Gly Leu Leu
                395                 400                 405
Ile His Cys Gln Ala Gly Val Ser Arg Ser Ala Thr Ile Val Ile
                410                 415                 420
Ala Tyr Leu Met Lys His Thr Arg Met Thr Met Thr Asp Ala Tyr
                425                 430                 435
Lys Phe Val Lys Gly Lys Arg Pro Ile Ile Ser Pro Asn Leu Asn
                440                 445                 450
Phe Met Gly Gln Leu Leu Glu Phe Glu Glu Asp Leu Asn Asn Gly
                455                 460                 465
Val Thr Pro Arg Ile Leu Thr Pro Lys Leu Met Gly Val Glu Thr
                470                 475                 480
Val Val
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<210> 2
<211> 190
<212> PRT
<213> Homo sapiens

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<400> 2

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  1                 5                  10                  15
Thr Thr Thr Pro Gln Ile Pro Ile Lys Met Glu Asn Phe Asn Asn
                 20                  25                  30
Phe Tyr Ile Leu Thr Ser Lys Glu Leu Gly Arg Gly Lys Phe Ala
                 35                  40                  45
Val Val Arg Gln Cys Ile Ser Lys Ser Thr Gly Gln Glu Tyr Ala
                 50                  55                  60
```

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```
Ala Lys Phe Leu Lys Lys Arg Arg Arg Gly Gln Asp Cys Arg Ala
                  65                  70                  75
Glu Ile Leu His Glu Ile Ala Val Leu Glu Leu Ala Lys Ser Cys
                  80                  85                  90
Pro Arg Val Ile Asn Leu His Glu Val Tyr Glu Asn Thr Ser Glu
                  95                 100                 105
Ile Ile Leu Ile Leu Glu Tyr Ala Ala Gly Gly Glu Ile Phe Ser
                 110                 115                 120
Leu Cys Leu Pro Glu Leu Ala Glu Met Val Ser Glu Asn Asp Val
                 125                 130                 135
Ile Arg Leu Ile Lys Gln Ile Leu Glu Gly Val Tyr Tyr Leu His
                 140                 145                 150
Gln Asn Asn Ile Val His Leu Asp Leu Lys Pro Gln Asn Ile Leu
                 155                 160                 165
Leu Ser Ser Ile Tyr Pro Leu Gly Asp Ile Lys Ile Val Asp Gly
                 170                 175                 180
Gly Met Ser Arg Lys Ile Gly Gln Cys Val
                 185                 190
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<210> 3
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<213> Homo sapiens

<220>
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<400> 3

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Met Ser Ser Leu Gly Ala Ser Phe Val Gln Ile Lys Phe Asp Asp
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Leu Gln Phe Phe Glu Asn Cys Gly Gly Gly Ser Phe Gly Ser Val
                 20                  25                  30
Tyr Arg Ala Lys Trp Ile Ser Gln Asp Lys Glu Val Ala Val Lys
                 35                  40                  45
Lys Leu Leu Lys Ile Glu Lys Glu Ala Glu Ile Leu Ser Val Leu
                 50                  55                  60
Ser His Arg Asn Ile Ile Gln Phe Tyr Gly Val Ile Leu Glu Pro
                 65                  70                  75
Pro Asn Tyr Gly Ile Val Thr Glu Tyr Ala Ser Leu Gly Ser Leu
                 80                  85                  90
Tyr Asp Tyr Ile Asn Ser Asn Arg Ser Glu Glu Met Asp Met Asp
                 95                 100                 105
His Ile Met Thr Trp Ala Thr Asp Val Ala Lys Gly Met His Tyr
                110                 115                 120
Leu His Met Glu Ala Pro Val Lys Val Ile His Arg Asp Leu Lys
                125                 130                 135
Ser Arg Asn Val Val Ile Ala Ala Asp Gly Val Leu Lys Ile Cys
                140                 145                 150
Asp Phe Gly Ala Ser Arg Phe His Asn His Thr Thr His Met Ser
                155                 160                 165
Leu Val Gly Thr Phe Pro Trp Met Ala Pro Glu Val Ile Gln Ser
                170                 175                 180
Leu Pro Val Ser Glu Thr Cys Asp Thr Tyr Ser Tyr Gly Val Val
                185                 190                 195
Leu Trp Glu Met Leu Thr Arg Glu Val Pro Phe Lys Gly Leu Glu
                200                 205                 210
Gly Leu Gln Val Ala Trp Leu Val Val Glu Lys Asn Glu Arg Leu
                215                 220                 225
Thr Ile Pro Ser Ser Cys Pro Arg Ser Phe Ala Glu Leu Leu His
```

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230 235 240
Gln Cys Trp Glu Ala Asp Ala Lys Lys Arg Pro Ser Phe Lys Gln
245 250 255
Ile Ile Ser Ile Leu Glu Ser Met Ser Asn Asp Thr Ser Leu Pro
260 265 270
Asp Lys Cys Asn Ser Phe Leu His Asn Lys Ala Glu Trp Arg Cys
275 280 285
Glu Ile Glu Ala Thr Leu Glu Arg Leu Lys Lys Leu Glu Arg Asp
290 295 300
Leu Ser Phe Lys Glu Gln Glu Leu Lys Glu Arg Glu Arg Arg Leu
305 310 315
Lys Met Trp Glu Gln Lys Leu Thr Glu Gln Ser Asn Thr Pro Leu
320 325 330
Leu Leu Pro Leu Ala Ala Arg Met Ser Glu Glu Ser Tyr Phe Glu
335 340 345
Ser Lys Thr Glu Glu Ser Asn Ser Ala Glu Met Ser Cys Gln Ile
350 355 360
Thr Ala Thr Ser Asn Gly Glu Gly His Gly Met Asn Pro Ser Leu
365 370 375
Gln Ala Met Met Leu Met Gly Phe Gly Asp Ile Phe Ser Met Asn
380 385 390
Lys Ala Gly Ala Val Met His Ser Gly Met Gln Ile Asn Met Gln
395 400 405
Ala Lys Gln Asn Ser Ser Lys Thr Thr Ser Lys Arg Arg Gly Lys
410 415 420
Lys Val Asn Met Ala Leu Gly Phe Ser Asp Phe Asp Leu Ser Glu
425 430 435
Gly Asp Asp Asp Asp Asp Asp Asp Gly Glu Glu Glu Asp Asn Asp
440 445 450
Met Asp Asn Ser Glu
455

<210> 4
<211> 485
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<213> Homo sapiens

<220>
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Met Ala Lys Gly Gly Ile Phe Pro Arg Pro Arg Cys Asp Ser Ser
1 5 10 15
Ser Leu Leu Glu Cys Arg Lys Ala Ile Ser Arg Glu Val Lys Ala
20 25 30
Met Ala Ser Leu Asp Asn Glu Phe Val Leu Arg Leu Glu Gly Val
35 40 45
Ile Glu Lys Val Asn Trp Asp Gln Asp Pro Lys Pro Ala Leu Val
50 55 60
Thr Lys Phe Met Glu Asn Gly Ser Leu Ser Gly Leu Leu Gln Ser
65 70 75
Gln Cys Pro Arg Pro Trp Pro Leu Leu Cys Arg Leu Leu Lys Glu
80 85 90
Val Val Leu Gly Met Phe Tyr Leu His Asp Gln Asn Pro Val Leu
95 100 105
Leu His Arg Asp Leu Lys Pro Ser Asn Val Leu Leu Asp Pro Glu
110 115 120
Leu His Val Lys Leu Ala Asp Phe Gly Leu Ser Thr Phe Gln Gly
125 130 135

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```
Gly Ser Gln Ser Gly Thr Gly Ser Gly Glu Pro Gly Gly Thr Leu
                140                 145                 150
Gly Tyr Leu Ala Pro Glu Leu Phe Val Asn Val Asn Arg Lys Ala
                155                 160                 165
Ser Thr Ala Ser Asp Val Tyr Ser Phe Gly Ile Leu Met Trp Ala
                170                 175                 180
Val Leu Ala Gly Arg Glu Val Glu Leu Pro Thr Glu Pro Ser Leu
                185                 190                 195
Val Tyr Glu Ala Val Cys Asn Arg Gln Asn Arg Pro Ser Leu Ala
                200                 205                 210
Glu Leu Pro Gln Ala Gly Pro Glu Thr Pro Gly Leu Glu Gly Leu
                215                 220                 225
Lys Glu Leu Met Gln Leu Cys Trp Ser Ser Glu Pro Lys Asp Arg
                230                 235                 240
Pro Ser Phe Gln Glu Cys Leu Pro Lys Thr Asp Glu Val Phe Gln
                245                 250                 255
Met Val Glu Asn Asn Met Asn Ala Ala Val Ser Thr Val Lys Asp
                260                 265                 270
Phe Leu Ser Gln Leu Arg Ser Ser Asn Arg Arg Phe Ser Ile Pro
                275                 280                 285
Glu Ser Gly Gln Gly Gly Thr Glu Met Asp Gly Phe Arg Arg Thr
                290                 295                 300
Ile Glu Asn Gln His Ser Arg Asn Asp Val Met Val Ser Glu Trp
                305                 310                 315
Leu Asn Lys Leu Asn Leu Glu Glu Pro Pro Ser Ser Val Pro Lys
                320                 325                 330
Lys Cys Pro Ser Leu Thr Lys Arg Ser Arg Ala Gln Glu Glu Gln
                335                 340                 345
Val Pro Gln Ala Trp Thr Ala Gly Thr Ser Ser Asp Ser Met Ala
                350                 355                 360
Gln Pro Pro Gln Thr Pro Glu Thr Ser Thr Phe Arg Asn Gln Met
                365                 370                 375
Pro Ser Pro Thr Ser Thr Gly Thr Pro Ser Pro Gly Pro Arg Gly
                380                 385                 390
Asn Gln Gly Ala Glu Arg Gln Gly Met Asn Trp Ser Cys Arg Thr
                395                 400                 405
Pro Glu Pro Asn Pro Val Thr Gly Arg Pro Leu Val Asn Ile Tyr
                410                 415                 420
Asn Cys Ser Gly Val Gln Val Gly Asp Asn Asn Tyr Leu Thr Met
                425                 430                 435
Gln Gln Thr Thr Ala Leu Pro Thr Trp Gly Leu Ala Pro Ser Gly
                440                 445                 450
Lys Gly Arg Gly Leu Gln His Pro Pro Pro Val Gly Ser Gln Glu
                455                 460                 465
Gly Pro Lys Asp Pro Glu Ala Trp Ser Arg Pro Gln Gly Trp Tyr
                470                 475                 480
Asn His Ser Gly Lys
                485
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<210> 5
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<212> PRT
<213> Homo sapiens

<220>
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  1               5                  10                  15
Arg Val Leu Val Leu Leu Asn Pro Arg Gly Gly Lys Gly Lys Ala
            20                  25                  30
Leu Gln Leu Phe Arg Ser His Val Gln Pro Leu Leu Ala Glu Ala
            35                  40                  45
Glu Ile Ser Phe Thr Leu Met Leu Thr Glu Arg Arg Asn His Ala
            50                  55                  60
Arg Glu Leu Val Arg Ser Glu Glu Leu Gly Arg Trp Asp Ala Leu
            65                  70                  75
Val Val Met Ser Gly Asp Gly Leu Met His Glu Val Val Asn Gly
            80                  85                  90
Leu Met Glu Arg Pro Asp Trp Glu Thr Ala Ile Gln Lys Pro Leu
            95                  100                 105
Cys Ser Leu Pro Ala Gly Ser Gly Asn Ala Leu Ala Ala Ser Leu
            110                 115                 120
Asn His Tyr Ala Gly Tyr Glu Gln Val Thr Asn Glu Asp Leu Leu
            125                 130                 135
Thr Asn Cys Thr Leu Leu Leu Cys Arg Arg Leu Leu Ser Pro Met
            140                 145                 150
Asn Leu Leu Ser Leu His Thr Ala Ser Gly Leu Arg Leu Phe Ser
            155                 160                 165
Val Leu Ser Leu Ala Trp Gly Phe Ile Ala Asp Val Asp Leu Glu
            170                 175                 180
Ser Glu Lys Tyr Arg Arg Leu Gly Glu Met Arg Phe Thr Leu Gly
            185                 190                 195
Thr Phe Leu Arg Leu Ala Ala Leu Arg Thr Tyr Arg Gly Arg Leu
            200                 205                 210
Ala Tyr Leu Pro Val Gly Arg Val Gly Ser Lys Thr Pro Ala Ser
            215                 220                 225
Pro Val Val Val Gln Gln Gly Pro Val Asp Ala His Leu Val Pro
            230                 235                 240
Leu Glu Glu Pro Val Pro Ser His Trp Thr Val Val Pro Asp Glu
            245                 250                 255
Asp Phe Val Leu Val Leu Ala Leu Leu His Ser His Leu Gly Ser
            260                 265                 270
Glu Met Phe Ala Ala Pro Met Gly Arg Cys Ala Ala Gly Val Met
            275                 280                 285
His Leu Phe Tyr Val Arg Ala Gly Val Ser Arg Ala Met Leu Leu
            290                 295                 300
Arg Leu Phe Leu Ala Met Glu Lys Gly Arg His Met Glu Tyr Glu
            305                 310                 315
Cys Pro Tyr Leu Val Tyr Val Pro Val Val Ala Phe Arg Leu Glu
            320                 325                 330
Pro Lys Asp Gly Lys Gly Val Phe Ala Val Asp Gly Glu Leu Met
            335                 340                 345
Val Ser Glu Ala Val Gln Gly Gln Val His Pro Asn Tyr Phe Trp
            350                 355                 360
Met Val Ser Gly Cys Val Glu Pro Pro Pro Ser Trp Lys Pro Gln
            365                 370                 375
Gln Met Pro Pro Pro Glu Glu Pro Leu
            380
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<210> 6
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<213> Homo sapiens

<220>
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<400> 6
Met Arg Trp Tyr Gln Pro Pro Asn Asp Trp Arg Ile Leu Val Leu
1 5 10 15
Cys Leu Ser Ser Tyr Ala Val Leu Met Cys Leu Leu Ser Ile Trp
20 25 30
Gln Arg Asp Lys Arg Asp Thr Ser Asn Phe Asp Lys Glu Phe Thr
35 40 45
Arg Gln Pro Val Glu Leu Thr Pro Thr Asp Lys Leu Phe Ile Met
50 55 60
Asn Leu Asp Gln Asn Glu Phe Ala Gly Phe Ser Tyr Thr Asn Pro
65 70 75
Glu Phe Val Ile Asn Val
80

<210> 7
<211> 721
<212> PRT
<213> Homo sapiens

<220>
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<223> Incyte ID No: 5504544CD1

<400> 7
Met Leu Phe Gly Leu Val Arg Gln Gly Leu Lys Cys Asp Gly Cys
1 5 10 15
Gly Leu Asn Tyr His Lys Arg Cys Ala Phe Ser Ile Pro Asn Asn
20 25 30
Cys Ser Gly Ala Arg Lys Arg Arg Leu Ser Ser Thr Ser Leu Ala
35 40 45
Ser Gly His Ser Val Arg Leu Gly Thr Ser Glu Ser Leu Pro Cys
50 55 60
Thr Ala Glu Glu Leu Ser Arg Ser Thr Thr Glu Leu Leu Pro Arg
65 70 75
Arg Pro Pro Ser Ser Ser Ser Ser Ser Ser Ala Ser Ser Tyr Thr
80 85 90
Gly Arg Pro Ile Glu Leu Asp Lys Met Leu Leu Ser Lys Val Lys
95 100 105
Val Pro His Thr Phe Leu Ile His Ser Tyr Thr Arg Pro Thr Val
110 115 120
Cys Gln Ala Cys Lys Lys Leu Leu Lys Gly Leu Phe Arg Gln Gly
125 130 135
Leu Gln Cys Lys Asp Cys Lys Phe Asn Cys His Lys Arg Cys Ala
140 145 150
Thr Arg Val Pro Asn Asp Cys Leu Gly Glu Ala Leu Ile Asn Gly
155 160 165
Asp Val Pro Met Glu Glu Ala Thr Asp Phe Ser Glu Ala Asp Lys
170 175 180
Ser Ala Leu Met Asp Glu Ser Glu Asp Ser Gly Val Ile Pro Gly
185 190 195
Ser His Ser Glu Asn Ala Leu His Ala Ser Glu Glu Glu Glu Gly
200 205 210
Glu Gly Gly Lys Ala Gln Ser Ser Leu Gly Tyr Ile Pro Leu Met
215 220 225
Arg Val Val Gln Ser Val Arg His Thr Thr Arg Lys Ser Ser Thr
230 235 240
Thr Leu Arg Glu Gly Trp Val Val His Tyr Ser Asn Lys Asp Thr
245 250 255
Leu Arg Lys Arg His Tyr Trp Arg Leu Asp Cys Lys Cys Ile Thr
260 265 270

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```
Leu Phe Gln Asn Asn Thr Thr Asn Arg Tyr Tyr Lys Glu Ile Pro
                275                 280                 285
Leu Ser Glu Ile Leu Thr Val Glu Ser Ala Gln Asn Phe Ser Leu
            290                 295                 300
Val Pro Pro Gly Thr Asn Pro His Cys Phe Glu Ile Val Thr Ala
        305                 310                 315
Asn Ala Thr Tyr Phe Val Gly Glu Met Pro Gly Gly Thr Pro Gly
    320                 325                 330
Gly Pro Ser Gly Gln Gly Ala Glu Ala Ala Arg Gly Trp Glu Thr
                335                 340                 345
Ala Ile Arg Gln Ala Leu Met Pro Val Ile Leu Gln Asp Ala Pro
            350                 355                 360
Ser Ala Pro Gly His Ala Pro His Arg Gln Ala Ser Leu Ser Ile
        365                 370                 375
Ser Val Ser Asn Ser Gln Ile Gln Glu Asn Val Asp Ile Ala Thr
    380                 385                 390
Val Tyr Gln Ile Phe Pro Asp Glu Val Leu Gly Ser Gly Gln Phe
                395                 400                 405
Gly Val Val Tyr Gly Gly Lys His Arg Lys Thr Gly Arg Asp Val
            410                 415                 420
Ala Val Lys Val Ile Asp Lys Leu Arg Phe Pro Thr Lys Gln Glu
        425                 430                 435
Ser Gln Leu Arg Asn Glu Val Ala Ile Leu Gln Ser Leu Arg His
    440                 445                 450
Pro Gly Ile Val Asn Leu Glu Cys Met Phe Glu Thr Pro Glu Lys
                455                 460                 465
Val Phe Val Val Met Glu Lys Leu His Gly Asp Met Leu Glu Met
            470                 475                 480
Ile Leu Ser Ser Glu Lys Gly Arg Leu Pro Glu Arg Leu Thr Lys
        485                 490                 495
Phe Leu Ile Thr Gln Ile Leu Val Ala Leu Arg His Leu His Phe
    500                 505                 510
Lys Asn Ile Val His Cys Asp Leu Lys Pro Glu Asn Val Leu Leu
                515                 520                 525
Ala Ser Ala Asp Pro Phe Pro Gln Val Lys Leu Cys Asp Phe Gly
            530                 535                 540
Phe Ala Arg Ile Ile Gly Glu Lys Ser Phe Arg Arg Ser Val Val
        545                 550                 555
Gly Thr Pro Ala Tyr Leu Ala Pro Glu Val Leu Leu Asn Gln Gly
    560                 565                 570
Tyr Asn Arg Ser Leu Asp Met Trp Ser Val Gly Val Ile Met Tyr
                575                 580                 585
Val Ser Leu Ser Gly Thr Phe Pro Phe Asn Glu Asp Glu Asp Ile
            590                 595                 600
Asn Asp Gln Ile Gln Asn Ala Ala Phe Met Tyr Pro Ala Ser Pro
        605                 610                 615
Trp Ser His Ile Ser Ala Gly Ala Ile Asp Leu Ile Asn Asn Leu
    620                 625                 630
Leu Gln Val Lys Met Arg Lys Arg Tyr Ser Val Asp Lys Ser Leu
                635                 640                 645
Ser His Pro Trp Leu Gln Glu Tyr Gln Thr Trp Leu Asp Leu Arg
            650                 655                 660
Glu Leu Glu Gly Lys Met Gly Glu Arg Tyr Ile Thr His Glu Ser
        665                 670                 675
Asp Asp Ala Arg Trp Glu Gln Phe Ala Ala Glu His Pro Leu Pro
    680                 685                 690
Gly Ser Gly Leu Pro Thr Asp Arg Asp Leu Gly Gly Ala Cys Pro
                695                 700                 705
Pro Gln Asp His Asp Met Gln Gly Leu Ala Glu Arg Ile Ser Val
            710                 715                 720
Leu
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<210> 8
<211> 249
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1511326CD1

<400> 8

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Ala	Gly	Glu	Asp	Arg	Glu	Ala	Pro	Gly	Gln	Arg	Arg	Arg	Leu	Gly	
				20					25						30
Phe	Leu	Ala	Thr	Ala	Trp	Leu	Thr	Phe	Tyr	Asp	Ile	Ala	Met	Thr	
				35					40						45
Ala	Gly	Trp	Leu	Val	Leu	Ala	Ile	Ala	Met	Val	Arg	Phe	Tyr	Met	
				50					55						60
Glu	Lys	Gly	Thr	His	Arg	Gly	Leu	Tyr	Lys	Ser	Ile	Gln	Lys	Thr	
				65					70						75
Leu	Lys	Phe	Phe	Gln	Thr	Phe	Ala	Leu	Leu	Glu	Ile	Val	His	Cys	
				80					85						90
Leu	Ile	Gly	Ile	Val	Pro	Thr	Ser	Val	Ile	Val	Thr	Gly	Val	Gln	
				95					100						105
Val	Ser	Ser	Arg	Ile	Phe	Met	Val	Trp	Leu	Ile	Thr	His	Ser	Ile	
				110					115						120
Lys	Pro	Ile	Gln	Asn	Glu	Glu	Ser	Val	Val	Leu	Phe	Leu	Val	Ala	
				125					130						135
Trp	Thr	Val	Thr	Glu	Ile	Thr	Arg	Tyr	Ser	Phe	Tyr	Thr	Phe	Ser	
				140					145						150
Leu	Leu	Asp	His	Leu	Pro	Tyr	Phe	Ile	Lys	Trp	Ala	Arg	Tyr	Asn	
				155					160						165
Phe	Phe	Ile	Ile	Leu	Tyr	Pro	Val	Gly	Val	Ala	Gly	Glu	Leu	Leu	
				170					175						180
Thr	Ile	Tyr	Ala	Ala	Leu	Pro	His	Val	Lys	Lys	Thr	Gly	Met	Phe	
				185					190						195
Ser	Ile	Arg	Leu	Pro	Asn	Lys	Tyr	Asn	Val	Ser	Phe	Asp	Tyr	Tyr	
				200					205						210
Tyr	Phe	Leu	Leu	Ile	Thr	Met	Ala	Ser	Tyr	Ile	Pro	Leu	Phe	Pro	
				215					220						225
Gln	Leu	Tyr	Phe	His	Met	Leu	Arg	Gln	Arg	Arg	Lys	Val	Leu	His	
				230					235						240
Gly	Glu	Val	Ile	Val	Glu	Lys	Asp	Asp							
				245											

<210> 9
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
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<400> 9

Met	Ala	Asp	Asp	Asp	Val	Leu	Phe	Glu	Asp	Val	Tyr	Glu	Leu	Cys	
1				5					10						15
Glu	Val	Ile	Gly	Lys	Gly	Pro	Phe	Ser	Val	Val	Arg	Arg	Cys	Ile	
				20					25						30

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```
Asn Arg Glu Thr Gly Gln Gln Phe Ala Val Lys Ile Val Asp Val
                  35                  40                  45
Ala Lys Phe Thr Ser Ser Pro Gly Leu Ser Thr Glu Gly Lys Arg
                  50                  55                  60
Trp Ile Ser Asn Leu Lys Arg Glu Ala Ser Ile Cys His Met Leu
                  65                  70                  75
Lys His Pro His Ile Val Glu Leu Leu Glu Thr Tyr Ser Ser Asp
                  80                  85                  90
Gly Met Leu Tyr Met Val Phe Glu Phe Met Asp Gly Ala Asp Leu
                  95                 100                 105
Cys Phe Glu Ile Val Lys Arg Ala Asp Ala Gly Phe Val Tyr Ser
                 110                 115                 120
Glu Ala Val Ala Ser Ile Leu Asp Lys His Ser Trp Lys Gln Leu
                 125                 130                 135
Gly Asp His Leu Asn Thr Ala Leu Ser Ser Ala
                 140                 145
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<212> PRT
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<220>
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<223> Incyte ID No: 1673761CD1

<400> 10

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Met Asn Ile Ala Asn Arg Lys Gln Glu Glu Met Lys Asp Met Ile
  1               5                  10                  15
Val Glu Thr Leu Asn Thr Met Lys Glu Glu Leu Leu Asp Asp Ala
                 20                  25                  30
Thr Asn Met Glu Phe Lys Asp Val Ile Val Pro Glu Asn Gly Glu
                 35                  40                  45
Pro Val Gly Thr Arg Glu Ile Lys Cys Cys Ile Arg Gln Ile Gln
                 50                  55                  60
Glu Leu Ile Ile Ser Arg Leu Asn Gln Ala Val Ala Asn Lys Leu
                 65                  70                  75
Ile Ser Ser Val Asp Tyr Leu Arg Glu Ser Phe Val Gly Thr Leu
                 80                  85                  90
Glu Arg Cys Leu Gln Ser Leu Glu Lys Ser Gln Asp Val Ser Val
                 95                 100                 105
His Ile Thr Ser Asn Tyr Leu Lys Gln Ile Leu Asn Ala Ala Tyr
                110                 115                 120
His Val Glu Val Thr Phe His Ser Gly Ser Ser Val Thr Arg Met
                125                 130                 135
Leu Trp Glu Gln Ile Lys Gln Ile Ile Gln Arg Ile Thr Trp Val
                140                 145                 150
Ser Pro Pro Ala Ile Thr Leu Glu Trp Lys Arg Lys Val Ala Gln
                155                 160                 165
Glu Ala Ile Glu Ser Leu Ser Ala Ser Lys Leu Ala Lys Ser Ile
                170                 175                 180
Cys Ser Gln Phe Arg Thr Arg Leu Asn Ser Ser His Glu Ala Phe
                185                 190                 195
Ala Ala Ser Leu Arg Gln Leu Glu Ala Gly His Ser Gly Arg Leu
                200                 205                 210
Glu Lys Thr Glu Asp Leu Trp Leu Arg Val Arg Lys Asp His Ala
                215                 220                 225
Pro Arg Leu Ala Arg Leu Ser Leu Glu Ser Cys Ser Leu Gln Asp
                230                 235                 240
Val Leu Leu His Arg Lys Pro Lys Leu Gly Gln Glu Leu Gly Arg
```

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                245                 250                 255
Gly Gln Tyr Gly Val Val Tyr Leu Cys Asp Asn Trp Gly Gly His
                260                 265                 270
Phe Pro Cys Ala Leu Lys Ser Val Val Pro Pro Asp Glu Lys His
                275                 280                 285
Trp Asn Asp Leu Ala Leu Glu Phe His Tyr Met Arg Ser Leu Pro
                290                 295                 300
Lys His Glu Arg Leu Val Asp Leu His Gly Ser Val Ile Asp Tyr
                305                 310                 315
Asn Tyr Gly Gly Gly Ser Ser Ile Ala Val Leu Leu Ile Met Glu
                320                 325                 330
Arg Leu His Arg Asp Leu Tyr Thr Gly Leu Lys Ala Gly Leu Thr
                335                 340                 345
Leu Glu Thr Arg Leu Gln Ile Ala Leu Asp Val Val Glu Gly Ile
                350                 355                 360
Arg Phe Leu His Ser Gln Gly Leu Val His Arg Asp Ile Lys Leu
                365                 370                 375
Lys Asn Val Leu Leu Asp Lys Gln Asn Arg Ala Lys Ile Thr Asp
                380                 385                 390
Leu Gly Phe Cys Lys Pro Glu Ala Met Met Ser Gly Ser Ile Val
                395                 400                 405
Gly Thr Pro Ile His Met Ala Pro Glu Leu Phe Thr Gly Lys Tyr
                410                 415                 420
Asp Asn Ser Val Asp Val Tyr Ala Phe Gly Ile Leu Phe Trp Tyr
                425                 430                 435
Ile Cys Ser Gly Ser Val Lys Leu Pro Glu Ala Phe Glu Arg Cys
                440                 445                 450
Ala Ser Lys Asp His Leu Trp Asn Asn Val Arg Arg Gly Ala Arg
                455                 460                 465
Pro Glu Arg Leu Pro Val Phe Asp Glu Glu Cys Trp Gln Leu Met
                470                 475                 480
Glu Ala Cys Trp Asp Gly Asp Pro Leu Lys Arg Pro Leu Leu Gly
                485                 490                 495
Ile Val Gln Pro Met Leu Gln Gly Ile Met Asn Arg Leu Cys Lys
                500                 505                 510
Ser Asn Ser Glu Gln Pro Asn Arg Gly Leu Asp Asp Ser Thr
                515                 520
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<210> 11
<211> 509
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1270442CD1

<400> 11

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Gln Glu Leu Ala Ser Leu Ala Arg Gly Cys Asp Phe Val Leu Pro
                20                  25                  30
Ser Arg Phe Lys Lys Arg Leu Lys Ala Phe Gln Gln Val Gln Thr
                35                  40                  45
Arg Lys Glu Glu Pro Leu Pro Pro Ala Thr Ser Gln Ser Ile Pro
                50                  55                  60
Thr Phe Tyr Phe Pro Arg Gly Arg Pro Gln Asp Ser Val Asn Val
                65                  70                  75
Asp Ala Val Ile Ser Lys Ile Glu Ser Thr Phe Ala Arg Phe Pro
                80                  85                  90
```

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```
His Glu Arg Ala Thr Met Asp Asp Met Gly Leu Val Ala Lys Ala
                 95                  100                 105
Cys Gly Cys Pro Leu Tyr Trp Lys Gly Pro Leu Phe Tyr Gly Ala
            110                 115                 120
Gly Gly Glu Arg Thr Gly Ser Val Ser Val His Lys Phe Val Ala
            125                 130                 135
Met Trp Arg Lys Ile Leu Gln Asn Cys His Asp Asp Ala Ala Lys
            140                 145                 150
Phe Val His Leu Leu Met Ser Pro Gly Cys Asn Tyr Leu Val Gln
            155                 160                 165
Glu Asp Phe Val Pro Phe Leu Gln Asp Val Val Asn Thr His Pro
            170                 175                 180
Gly Leu Ser Phe Leu Lys Glu Ala Ser Glu Phe His Ser Arg Tyr
            185                 190                 195
Ile Thr Thr Val Ile Gln Arg Ile Phe Tyr Ala Val Asn Arg Ser
            200                 205                 210
Trp Ser Gly Arg Ile Thr Cys Ala Glu Leu Arg Arg Ser Ser Phe
            215                 220                 225
Leu Gln Asn Val Ala Leu Leu Glu Glu Glu Ala Asp Ile Asn Gln
            230                 235                 240
Leu Thr Glu Phe Phe Ser Tyr Glu His Phe Tyr Val Ile Tyr Cys
            245                 250                 255
Lys Phe Trp Glu Leu Asp Thr Asp His Asp Leu Leu Ile Asp Ala
            260                 265                 270
Asp Asp Leu Ala Arg His Asn Asp His Ala Leu Ser Thr Lys Met
            275                 280                 285
Ile Asp Arg Ile Phe Ser Gly Ala Val Thr Arg Gly Arg Lys Val
            290                 295                 300
Gln Lys Glu Gly Lys Ile Ser Tyr Ala Asp Phe Val Trp Phe Leu
            305                 310                 315
Ile Ser Glu Glu Asp Lys Lys Thr Pro Thr Ser Ile Glu Tyr Trp
            320                 325                 330
Phe Arg Cys Met Asp Leu Asp Gly Asp Gly Ala Leu Ser Met Phe
            335                 340                 345
Glu Leu Glu Tyr Phe Tyr Glu Glu Gln Cys Arg Ser Val Asp Ser
            350                 355                 360
Met Ala Ile Glu Ala Leu Pro Phe Gln Asp Cys Leu Cys Gln Met
            365                 370                 375
Leu Asp Leu Val Lys Pro Arg Thr Glu Gly Lys Ile Thr Leu Gln
            380                 385                 390
Asp Leu Lys Arg Cys Lys Leu Ala Asn Val Phe Phe Asp Thr Phe
            395                 400                 405
Phe Asn Ile Glu Lys Tyr Leu Asp His Glu Gln Lys Glu Gln Ile
            410                 415                 420
Ser Leu Leu Arg Asp Gly Asp Ser Gly Gly Pro Glu Leu Ser Asp
            425                 430                 435
Trp Glu Lys Tyr Ala Ala Glu Glu Tyr Asp Ile Leu Val Ala Glu
            440                 445                 450
Glu Thr Ala Gly Glu Pro Trp Glu Asp Gly Phe Glu Ala Glu Leu
            455                 460                 465
Ser Pro Val Glu Gln Lys Leu Ser Ala Leu Arg Ser Pro Leu Ala
            470                 475                 480
Gln Arg Pro Phe Phe Glu Ala Pro Ser Pro Leu Gly Ala Val Asp
            485                 490                 495
Leu Tyr Glu Tyr Ala Cys Gly Asp Glu Asp Leu Glu Pro Leu
            500                 505
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<210> 12
<211> 142
<212> PRT

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<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1877133CD1

<400> 12

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Ala	Phe	Ser	Leu	Asn	Asp	Ala	Ser	Asp	Asp	Thr	Pro	Pro	Glu	Asp
				20					25					30
Ser	Ile	Pro	Leu	Val	Phe	Pro	Glu	Leu	Asp	Gln	Gln	Leu	Gln	Pro
				35					40					45
Leu	Pro	Pro	Cys	His	Asp	Ser	Glu	Glu	Ser	Met	Glu	Val	Phe	Lys
				50					55					60
Gln	His	Cys	Gln	Ile	Ala	Glu	Glu	Tyr	His	Glu	Val	Lys	Lys	Glu
				65					70					75
Ile	Thr	Leu	Leu	Glu	Gln	Arg	Lys	Lys	Glu	Leu	Ile	Ala	Lys	Leu
				80					85					90
Asp	Gln	Ala	Glu	Lys	Glu	Lys	Val	Asp	Ala	Ala	Glu	Leu	Val	Arg
				95					100					105
Glu	Phe	Glu	Ala	Leu	Thr	Glu	Glu	Asn	Arg	Thr	Leu	Arg	Leu	Ala
				110					115					120
Gln	Ser	Gln	Cys	Val	Glu	Gln	Leu	Glu	Lys	Leu	Arg	Ile	Gln	Tyr
				125					130					135
Gln	Lys	Arg	Gln	Gly	Ser	Ser								
				140										

<210> 13
<211> 221
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2636759CD1

<400> 13

Met	Thr	Ser	Gly	Glu	Val	Lys	Thr	Ser	Leu	Lys	Asn	Ala	Tyr	Ser
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Ser	Ala	Lys	Arg	Leu	Ser	Pro	Lys	Met	Glu	Glu	Glu	Gly	Glu	Glu
				20					25					30
Glu	Asp	Tyr	Cys	Thr	Pro	Gly	Ala	Phe	Glu	Leu	Glu	Arg	Leu	Phe
				35					40					45
Trp	Lys	Gly	Ser	Pro	Gln	Tyr	Thr	His	Val	Asn	Glu	Val	Trp	Pro
				50					55					60
Lys	Leu	Tyr	Ile	Gly	Asp	Glu	Ala	Thr	Ala	Leu	Asp	Arg	Tyr	Arg
				65					70					75
Leu	Gln	Lys	Ala	Gly	Phe	Thr	His	Val	Leu	Asn	Ala	Ala	His	Gly
				80					85					90
Arg	Trp	Asn	Val	Asp	Thr	Gly	Pro	Arg	Leu	Leu	Pro	Arg	His	Gly
				95					100					105
His	Pro	Val	Pro	Arg	Arg	Gly	Gly	Pro	Thr	Thr	Cys	Pro	Pro	Phe
				110					115					120
Asp	Leu	Ser	Val	Phe	Phe	Tyr	Pro	Ala	Ala	Ala	Phe	Ile	Asp	Arg
				125					130					135
Ala	Leu	Ser	Asp	Asp	His	Ser	Lys	Ile	Leu	Val	His	Cys	Val	Met
				140					145					150
Gly	Arg	Ser	Arg	Ser	Ala	Thr	Leu	Val	Leu	Ala	Tyr	Leu	Met	Ile
				155					160					165

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```
His Lys Asp Met Thr Leu Val Asp Ala Ile Gln Gln Val Ala Lys
                170                 175                 180
Asn Arg Cys Val Leu Pro Asn Arg Gly Phe Leu Lys Gln Leu Arg
                185                 190                 195
Glu Leu Asp Lys Gln Leu Val Gln Gln Arg Arg Arg Ser Gln Arg
                200                 205                 210
Gln Asp Gly Glu Glu Glu Asp Asp Arg Glu Leu
                215                 220
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<210> 14
<211> 462
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2716815CD1

<400> 14

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Lys Thr Gly Phe Leu His Asn Gly Arg Ala Met Gly Asn Met Arg
                20                  25                  30
Lys Thr Tyr Trp Ser Ser Arg Ser Glu Phe Lys Asn Asn Phe Leu
                35                  40                  45
Asn Ile Asp Pro Ile Thr Met Ala Tyr Ser Leu Asn Ser Ser Ala
                50                  55                  60
Gln Glu Arg Leu Ile Pro Leu Gly His Ala Ser Lys Ser Ala Pro
                65                  70                  75
Met Asn Gly His Cys Phe Ala Glu Asn Gly Pro Ser Gln Lys Ser
                80                  85                  90
Ser Leu Pro Pro Leu Leu Ile Pro Pro Ser Glu Asn Leu Gly Pro
                95                 100                 105
His Glu Glu Asp Gln Val Val Cys Gly Phe Lys Lys Leu Thr Val
               110                 115                 120
Asn Gly Val Cys Ala Ser Thr Pro Pro Leu Thr Pro Ile Lys Asn
               125                 130                 135
Ser Pro Ser Leu Phe Pro Cys Ala Pro Leu Cys Glu Arg Gly Ser
               140                 145                 150
Arg Pro Leu Pro Pro Leu Pro Ile Ser Glu Ala Leu Ser Leu Asp
               155                 160                 165
Asp Thr Asp Cys Glu Val Glu Phe Leu Thr Ser Ser Asp Thr Asp
               170                 175                 180
Phe Leu Leu Glu Asp Ser Thr Leu Ser Asp Phe Lys Tyr Asp Val
               185                 190                 195
Pro Gly Arg Arg Ser Phe Arg Gly Cys Gly Gln Ile Asn Tyr Ala
               200                 205                 210
Tyr Phe Asp Thr Pro Ala Val Ser Ala Ala Asp Leu Ser Tyr Val
               215                 220                 225
Ser Asp Gln Asn Gly Gly Val Pro Asp Pro Asn Pro Pro Pro Pro
               230                 235                 240
Gln Thr His Arg Arg Leu Arg Arg Ser His Ser Gly Pro Ala Gly
               245                 250                 255
Ser Phe Asn Lys Pro Ala Ile Arg Ile Ser Asn Cys Cys Ile His
               260                 265                 270
Arg Ala Ser Pro Asn Ser Asp Glu Asp Lys Pro Glu Val Pro Pro
               275                 280                 285
Arg Val Pro Ile Pro Pro Arg Pro Val Lys Pro Asp Tyr Arg Arg
               290                 295                 300
Trp Ser Ala Glu Val Thr Ser Ser Thr Tyr Ser Asp Glu Asp Arg
```

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                305                 310                 315
Pro Pro Lys Val Pro Pro Arg Glu Pro Leu Ser Pro Ser Asn Ser
                320                 325                 330
Arg Thr Pro Ser Pro Lys Ser Leu Pro Ser Tyr Leu Asn Gly Val
                335                 340                 345
Met Pro Pro Thr Gln Ser Phe Ala Pro Asp Pro Lys Tyr Val Ser
                350                 355                 360
Ser Lys Ala Leu Gln Arg Gln Asn Ser Glu Gly Ser Ala Ser Lys
                365                 370                 375
Val Pro Cys Ile Leu Pro Ile Ile Glu Asn Gly Lys Lys Val Ser
                380                 385                 390
Ser Thr His Tyr Tyr Leu Leu Pro Glu Arg Pro Pro Tyr Leu Asp
                395                 400                 405
Lys Tyr Glu Lys Phe Phe Arg Glu Ala Glu Glu Thr Asn Gly Gly
                410                 415                 420
Ala Gln Ile Gln Pro Leu Pro Ala Asp Cys Gly Ile Ser Ser Ala
                425                 430                 435
Thr Glu Lys Pro Asp Ser Lys Thr Lys Met Asp Leu Gly Gly His
                440                 445                 450
Val Lys Arg Lys His Leu Ser Tyr Val Val Ser Pro
                455                 460
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<210> 15
<211> 2192
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 480457CB1

<400> 15

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ttttcagcct cctcatgcct ccgtctcctt tagacgacag ggtagtagtg gcactatcta 180
ggcccgtccg acctcaggat ctcaaccttt gtttagactc tagttacctt ggctctgcca 240
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ccattgccgc tggcaccacc accactgcca tcggaacctc taccacctgc cctgctaacc 480
agatggtcaa caataatgag aatacaggct ctctaagtcc atcaagtggg gtgggcagcc 540
ctgtgtcagg gacccccaag cagctagcca gcatcaaaat aatctacccc aatgacttgg 600
caaagaagat gaccaaatgc agcaagagtc acctgccgag tcagggccct gtcatcattg 660
actgcaggcc cttcatggag tacaacaaga gtcacatcca aggagctgtc cacattaact 720
gtgccgataa gatcagccgg cggagactgc agcagggcaa gatcactgtc ctagacttga 780
tttcctgtag ggaaggcaag gactctttca agaggatctt ttccaaagaa attatagttt 840
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tcgagtccct gaagagagaa ggcaaagaac ctctggtgtt gaaaggtgga cttagtagtt 960
ttaagcagaa ccatgaaaac ctctgtgaca actccctcca gctccaagag tgccgggagg 1020
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atgctcagga cctggacacc atgcagcggc tgaacatcgg ctacgtcatc aacgtcacca 1200
ctcatcttcc cctctaccac tatgagaaag gcctgttcaa ctacaagcgg ctgccagcca 1260
ctgacagcaa caagcagaac ctgcggcagt actttgaaga ggcttttgag ttcattgagg 1320
aagctcacca gtgtgggaag gggcttctca tccactgcca ggctggggtg tcccgctccg 1380
ccaccatcgt catcgcttac ttgatgaagc acactcggat gaccatgact gatgcttata 1440
aatttgtcaa aggcaaacga ccaattatct ccccaaacct taacttcatg gggcagttgc 1500
tagagttcga ggaagaccta aacaacggtg tgacaccgag aatccttaca ccaaagctga 1560
tgggcgtgga gacggttgtg tgacaatggt ctggatggaa aggattgctg ctctccatta 1620
ggagacaatg aggaaggagg atggattctg gttttttttc tttctttttt tttttgtagt 1680
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tgggagtaag tttgtgaatg gaaacaaact tgtttaaaca ctttattttt aacaagtgta 1740
agaagactat aacttttgat gccattgaga ttcacctccc acaaactgac aaattaagga 1800
ggttaaagaa gtaatttttt taagccaaca ataaaaatat aatacaactt gtttctcccc 1860
cttttccttt taagctattt gtagagttta tgactaaata gtctgtgcag gttcatagac 1920
cgaagatact acacacttta aaccaattaa aaagaaccaa aagtaaatag aaaagacatt 1980
gaatcaccaa ggcctgggat caacctgggc tgtccacaca gaaaacaaaa acccaaccaa 2040
accaagccct gttgtgctca ctggtgcaaa gagaagatca gggcagctta agtggtctaa 2100
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tctggatttt ttttttttc cttctctggg tt 2192

<210> 16
<211> 1338
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> 959, 1029, 1159
<223> a or g or c or t, unknown, or other

<220>
<221> misc_feature
<223> Incyte ID No: 563663CB1

<400> 16
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ctggaggggg cagtcccggg agaacctgcg gcggccggag cggtaaaaat aagtgactaa 180
agaagcagac ctgggaatca cctaacatgt cgaggaggag atttgattgc cgaagtattt 240
caggcctact aactacaact cctcaaattc caataaaaat ggaaaacttt aataatttct 300
atatacttac atctaaagag ctagggagag gaaaatttgc tgtggttaga caatgtatat 360
caaaatctac tggccaagaa tatgctgcaa aatttctaaa aaagagaaga agaggacagg 420
attgtcgggc agaaatttta cacgagattg ctgtgcttga attggcaaag tcttgtcccc 480
gtgttattaa tcttcatgag gtctatgaaa atacaagtga aatcattttg atattggaat 540
atgctgcagg tggagaaatt ttcagcctgt gtttacctga gttggctgaa atggtttctg 600
aaaatgatgt tatcagactc attaaacaaa tacttgaagg agtttattat ctacatcaga 660
ataacattgt acaccttgat ttaaagccac agaatatatt actgagcagc atataccctc 720
tcggggacat taaaatagta gatgggggaa tgtctcgaaa aatagggcaa tgcgtgtgac 780
cttcgggaaa tcatgggaac accagaatat ttagctccag aaatcctgaa ctatgatccc 840
attaccacag aaacagatat gtggaatatt ggtataatag catatatgtc gctaactcac 900
acatcaccat ttgtgggaga agataatcaa gaaacatacc tcaatctctc tcaagttant 960
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gcctacagca gcgggacttt gcaacattgt ctcacctgaa cgaacctcca gttcccctca 1140
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cgggtgaaga gaagtacgag atctcccgcg gttgcagact gctcaaacca ttcgtctgat 1260
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gacttgcttc ccccctac 1338

<210> 17
<211> 1706
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 1425842CB1

<400> 17

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tactttgtca ttatgagatg tcgtctctcg gtgcctcctt tgtgcaaatt aaatttgatg 180
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aaatactcag tgtcctcagt cacagaaaca tcatccagtt ttatggagta attcttgaac 360
ctcccaacta tggcattgtc acagaatatg cttctctggg atcactctat gattacatta 420
acagtaacag aagtgaggag atggatatgg atcacattat gacctgggcc actgatgtag 480
ccaaaggaat gcattattta catatggagg ctcctgtcaa ggtgattcac agagacctca 540
agtcaagaaa cgttgttata gctgctgatg gagtattgaa gatctgtgac tttggtgcct 600
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cagaagttat ccagagtctc cctgtgtcag aaacttgtga cacatattcc tatggtgtgg 720
ttctctggga gatgctaaca agggaggtcc cctttaaagg tttggaagga ttacaagtag 780
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tgcaggccat gatgctgatg ggctttgggg atatcttctc aatgaacaaa gcaggagctg 1320
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aatgaaagca gaaagcaaag taataaaatc acaaatgttt ggaaaacaca aaagtaactt 1560
gtttatctca gtctgtacaa aaacagtaag gaggcagaaa gccaagcact gcatttttag 1620
ggcaatcaca tttacatgac cgtatttctt atcattctac tttattctgc tacagaaaac 1680
gcgggagatt agccaagagt tattat 1706

<210> 18
<211> 2140
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> Incyte ID No: 2349047CB1

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acggctcgca atttccagag gccccctggc accttccagc ctgatgtcgt gcgtcaagtt 180
atggcccagc ggtgcccccg ccccccttggt gtccatcgag gaactggaga accaggagct 240
cgtcggcaaa ggcgggttcg gcacagtgtt ccgggcgcaa cataggaagt ggggctacga 300
tgtggcggtc aagatcgtaa actcgtgagt gaccccggtt gaccccagcc gcaatctggc 360
caaaaaggtg gagccactgt gctctggggc ctgaatggcg aagggaggga ttttcccacg 420
accccggtgc gactccagct ctctcctgga gtgtaggaag gcgatatcca gggaggtcaa 480
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gaactgggac caagatccca agccggctct ggtgactaaa ttcatggaga acggctcctt 600
gtcggggctg ctgcagtccc agtgccctcg gccctggccg ctcctttgcc gcctgctgaa 660
agaagtggtg cttgggatgt tttacctgca cgaccagaac ccggtgctcc tgcaccggga 720
cctcaagcca tccaacgtcc tgctggaccc agagctgcac gtcaagctgg cagattttgg 780
cctgtccaca tttcagggag gctcacagtc agggacaggg tccggggagc caggggcac 840
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gccaaccgaa ccatcactcg tgtacgaagc agtgtgcaac aggcagaacc ggccttcatt 1020
ggctgagctg ccccaagccg ggcctgagac tcccggctta gaaggactga aggagctaat 1080
gcagctctgc tggagcagtg agcccaagga cagaccctcc ttccaggaat gcctaccaaa 1140
aactgatgaa gtcttccaga tggtggagaa caatatgaat gctgctgtct ccacggtaaa 1200

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